Research Article

# The Effectiveness of the Online Educational Platform Blackboard in Managing Education Processes At the University Of Hail a Field Study from the Faculty Members' Point Of View

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### ABSTRACT

The study aimed to identify the effectiveness of the electronic educational platform Blackboard in managing education operations at the University of Hail. The sample of the study consisted of 12 faculty members at the University of Hail. The interview was used. The qualitative approach was used to suit the study applications. The results of the study concluded that the most used services were primarily raising course plans and teaching content and raising and receiving assignments from students, then this is followed by cloud storage, discussion and dialogue rooms, and e-mail, and in the last comes electronic exams, monitoring grades, and creating virtual classes, blogs, wikis, and groups of students, and opinion polls. The results showed that the facilities are primarily in providing training courses and providing technical support. The difficulties were evident in the weakness of technical support and the lack of training courses.

Keywords: Blackboard, Learning Processes Management, E-Learning.

#### **INTRODUCTION**

The current era is characterized by the diversity of educational concepts, the rapid development of communication, and digital technology as a result of three revolutions that the world is experiencing today: the information revolution that caused a huge explosion of knowledge in the amount of knowledge; the communication revolution represented by modern communication technologies and the computer revolution that entered all areas of life and merged with it (Okike & Morogosi, 2017). From this angle, education has been affected by the features of this era, and the traditional curricula and traditional teaching methods such as memorization, presentation, and traditional educational methods are no longer compatible with these components. Therefore, educational institutions have sought attention to preparing generations capable of accepting the concepts of self-learning and continuous learning and exploiting various modern technologies in the development of thinking, access to various sources of informationand the acquisition of skills to deal with modern technologies, which are among the skills of the twenty-first century (Karplus, 2017).

The Kingdom of Saudi Arabia was one of the countries that paid attention to this, and it has many notable attempts to activate the role of technology in the development of education. The actual beginning was in the current decade when the national plan for technology strengthened that in 2013. Among its recommendations was the adoption of e-learning and distance education and its application in Universities (Alshammari, 2015). In addition to the establishment of the National Center for E-Learning and Distance Education, one of the most important goals of which is to spread e-learning and distance education applications in line with quality standards. The center was also assigned to develop a plan to introduce e-learning in Saudi universities, and to provide technical and technical support to them (Alsobahi, 2017).

Learning Management System LMS is one of the most important components of e-learning, and it is sometimes called as the educational platforms.E-learning management system can be known as an electronic system that includes electronic services through the Internet for educational content, and it also allows granting students, teachers and supervisors the accessibility to it (Lee et al, 2019). These services include access privileges according to the level granted to the user, control and modification of content, communication tools, student performance monitoring, and other tools (Kasim & Khalid, 2016).

One of the most important e-learning management systems used in universities is the Blackboard system. The University of Hail is considered one of the first universities in the Kingdom that sought to activate e-learning and encouraged its use and paid attention to it due to the services of the Blackboard e-learning management system that contribute to strengthening the national plan by developing the educational process, such as providing educational content, developing communication tools between teacher and students, and among students and each other, or between students and content, through a set of tools (Abdelhmed, 2020).

The great challenge that the University of Hail faces is not in providing technical innovations as hardware and software only, but in how to use them optimally and correctly in the educational process according to the theories of instructional design. Moreover, to make optimal use of them to serve the educational process in line with the endeavors calling for the adaptation of technology in the educational process and to achieve the goals consistent with the development of modern theories in the learning and teaching process (Al Meajel& Sharadgah, 2018).

Based on the previous vision related to the challenge facing Saudi universities, the call on the transformation towards a knowledge society in the Kingdom of Saudi Arabia came, which focuses in its course on the processes of development, reform and renewal in the mechanisms of the educational process and the introduction of e-

learning platforms, including the Blackboard platform (Alghafis et al, 2020). On the other hand, the national strategy to transform into a knowledge society emphasized the importance of employing the requirements of e-learning and distance education, with the aim of developing the educational process, in addition to increasing the importance of education, training and human development (Aljohani &Alrehaili, 2016).

Hence, the study on the effectiveness of the electronic educational platform Blackboard in managing education operations at the University of Hail is justified, in light of the policies presented on the local and international educational arena related to the need to develop and modernize the educational institution in the Kingdom of Saudi Arabia; One of those justifications is for the educational process to keep pace with the modernization of e-learning so that the teaching staff at the University of Hail can design methods through modern technologies that can help them to perform their educational roles effectively.

## **PROBLEM OF THE STUDY**

In view of the many services and features provided by the Blackboard e-learning management system, as the system allows the teaching content to be uploaded on the electronic platform in several forms (text, pictures, and video), and it also provides services that facilitate interaction and communication between a faculty member and students, or among students and each other, such as discussion rooms and virtual classes in addition to the mechanisms for uploading and correcting assignments, and electronically submitting and marking exams (Varnell, 2016).

It is worth noting that the e-learning management system Blackboard at the University of Hail contributes to enhancing the work of the faculty members, and saves the effort and time required for them in the work of some administrative and organizational tasks during the teaching of the academic courses required of them (Ali, 2017). As the University of Hail is one of the first universities which were interested in providing and activating this system, which costs the university a lot of material and human capabilities to provide, activate and maintain it. So, it was noted that there is a reluctance of faculty members to use the Blackboard system, as the statistics of the Deanship of E-Learning and Distance Learning at the University of Hail proved that there were only 37% of the university's total faculty who were using the Blackboard System (Alturise, 2020).

Whereas the University of Hail is required to develop its structure in accordance with the developments taking place and related to the e-learning platforms, including Blackboard, to keep pace with all that is new in the educational arena; this will only happen through the development of their systems and programs, in accordance with these developments. In addition to adopting a culture of development, reform and renewal in order to obtain effective educational outputs, therefore, this study calls for a consideration of the effectiveness of the electronic educational platform Blackboard in managing educational processes at the University of Hail. So, the study problem can be crystallized in the following main question:

# What is the effectiveness of the electronic educational platform Blackboard in managing the educational processes at the University of Hail?

# **QUESTIONS OF THE STUDY**

- 1. What are the most important Blackboard education management system services actually used by faculty members at the University of Hail?
- 2. What is the availability of facilities for faculty members at the University of Hail to use the Blackboard system?
- 3. What are the difficulties that face faculty members at the University of Hail in using the Blackboard system?
- 4. What are the attitudes of the faculty members at the University of Hail towards using the Blackboard system?

# **OBJECTIVES OF THE STUDY**

- 1. Identifying the reality of the use of Blackboard education management system by faculty members at the College of Education at the University of Hail.
- 2. Identifying the most important Blackboard Learning Management System services actually used by faculty members at the University of Hail.
- 3. Identifying the availability of facilities for faculty members at the University of Hail regarding the useof the Blackboard Learning Management System.
- 4. Identifying the attitudes of faculty members in Hail towards using the Blackboard Learning Management System.

# SIGNIFICANCE OF THE STUDY

- 1. Shedding light on the quality of services that are used by faculty members.
- 2. Investigating the impact of the facilities and services available through the specialized deanships.
- 3. Monitoring the difficulties or obstacles faced by faculty members, and trying to develop appropriate recommendations for optimal use of the Blackboard Learning Management System.
- 4. Disclosing the mechanisms for developing training programs related to the Blackboard platform.

# BACKGROUND

# 1. Blackboard learning management system

It is an integrated system that manages the educational process synchronously and asynchronously, and provides a safe and easy-to-use learning environment, where faculty members present their courses and lectures by adding

multimedia (text, images, audio, video, and graphics) in which learners meet to browse the content, each according to his need. They communicate with each other through multiple communication tools, e-mail and forums without being restricted by time and place factors, or through virtual classrooms that can be operated from any type of smart device (Kassem, 2018)

On the other hand, the Blackboard system is a closed-source learning management system produced by Blackboard, one of the global companies and a leader in e-learning management systems, which was established in 1997 as a consulting company for distance learning systems, non-profit organizations that is legislated for distance learning systems. In 2000, the company appeared in its new form and introduced learning systems, and development continued until it was transformed into a public company in 2004. (Lee et al, 2019)

It should be noted that the Blackboard Learning Management System is an integrated system responsible for managing the electronic educational process, adopted by the Saudi Ministry of Higher Education and applied to all Saudi universities, and it includes many functions such as exams, forums, dialogue rooms, questionnaires, virtual classes ... and others (Sibaya, 2018). Hence, the Blackboard Company has participated in many educational institutions such as Cornell University, George Washington University and some computer and communications companies to develop and update their electronic system from time to time according to the needs and goals of educational institutions and issued the first version of the e-learning program in 1998, then designed the I program - college in 2011, and it continued to develop until the system version of Blackboard 9 appeared (Sultana, 2020).

Procedurally, it is defined in this study that as one of the e-learning management systems used scientifically at the University of Hail, and is designed to provide a number of services to assist in managing, organizing and following up the educational process, and provides communication and interaction between the teacher and the student, and among thestudents with each other remotely using the Internet. Its services include pages Courses, and discussion forums, exams, letters, notice board, calendar, academic resources and others, and this system is available in several languages, including Arabic and English.

## 2. Blackboard system functions

The Blackboard system offers a number of tools that allow the user to interact with his peers, as these tools are based on a set of capabilities that the Blackboard system offers to users. The functions can be represented in the following: (Sibaya, 2018).

- 1. Learning tools, which are tools that the learner interacts with in his study, such as: the Users Directory, the address book, the Announcements, the Calendar, the tasks that the learner should perform, the Tasks, and the Grades.
- 2. Presentation of the teaching content –E- contentin several methods as follows: Textual information accompanied by pictures, drawings and other multimedia elements, in addition to documents and files related to the subject of the study: Documents and files.
- 3. Reviewing links to important sites.
- 4. Reviewing the relevant E Book and references available on the network.
- 5. Communication between teacher and students or among students and each other through a set of tools: E-mail, the discussion board, the chat panel, or the virtual classroom.

### 3. The advantages of the Blackboard system

The blackboard system has a number of advantages, which are as follows: (Sultana, 2020).

- 1. Ease of used: The Blackboard provides easy interaction and communication with academic content at any time and from anywhere.
- 2. Provide continuous and immediate feedback on students' inquiries or test scores via discussion board or email.
- 3. Improve the communication performance: it facilitates communication between students and teachers, or between students and each other.
- 4. Following-up: The Blackboard system tracks students 'and teachers' usage of it and files the results in a statistical file.
- 5. Improve and building skills: Using the tools of the Blackboard system develops a number of skills among its users when using it, such as the skill of time management, discussion, etc.

We note from the foregoing that the use of learning systems tools has many important educational benefits that can be implemented alone or together to achieve high benefit and here the researcher indicates that the University of Hail should develop a technical structure and a blackboard education management system.

# PROCEDURES OF THE FIELD STUDY

## Study Approach

The study followed the Descriptive Qualitative Research approach, which is concerned with studying the phenomenon as it is in reality, describing it accurately, and understanding it in a deeper way, by extrapolating the explanations from that phenomenon. Then it is expressed in a term that ensures that the factors are understood (Cohen et al, 2011).

## **Study Population**

The study population consisted of faculty members at the University of Hail (lecturer - assistant professor - associate professor - professor), as their number reached (1925) members, according to the Higher Education

Statistics Center at the Ministry of Education in the Kingdom of Saudi Arabia for the 2016 academic year. A sample was selected of the faculty members amounted to (322), which represented (16.72%), and for the occasion of the qualitative curriculum, an intentional sample of (12) faculty members at the university was chosen, and the study sample was chosen from the faculty according to the Snowball sample methodology.

# Study Instrument

The interview instrument was used to collect information, where the interview is defined as a specialized type of debate, argument or discourse that the researcher uses to uncover experiences of information and interpretations, and the researcher also ensures through using the interview that no external influences affect the response of the sample, the interview form is designed by the researcher, which provides the answers to the study questions, as the interview form included (5) basic dimensions.

Accordingly, a structured design was built to address the questions in a manner based on the theoretical frameworks related to the study and linked to the objectives of the study. After that, the planning and the questionnaire were presented to a group of referees, including university professors and specialists in the field of educational technology, and at a later stage the results of the initial interview were tested and analyzed and linked with the study questions to find out the extent of the sincerity and direction of the questions in achieving the study objectives in a clear and direct manner. After the initial analysis of the first interview, it was found that the dimensions of the interview form as shown in the following figure are capable of achieving the objectives of the study.



# Figure (1) The interview form points in the final version

# **Interview Implementation Procedures**

- 1. Before carrying out the interviews: During the implementation of the interviews, the researcher did the following:
- ✓ Determining the sample that was chosen by the Snowball method, where the first individual is selected and interviewed, and then he nominates the faculty members.
- ✓ Determine the appropriate time for each person from the study sample to conduct the interview, according to what his schedule and tasks permit.
- ✓ The interview questions were tested on the arbitrators before their implementation on the study sample to ensure that the interview questions achieve the objectives of the study.
- 2. During implementation: Before starting the interviews, the researcher did the following:
- ✓ Acknowledging the confidentiality of the sample members' data and not using the information other than achieving the research objectives.
- $\checkmark$  Study sample members have the option to answer or abstain from any question.
- $\checkmark$  The duration of the interview shall not exceed a maximum of 20 minutes.

- ✓ Space and time were given to the sample members to be free to respond and express, and to ask about their justifications.
- $\checkmark$  The interview time ranged from 10 to 20 minutes.
- ✓ Open interviews were conducted with the sample members, using the linear style, as the main dimension were used in building the instrument on the study questions, so that the interview questions branched out from the main dimensions that were identified and achieved the research objectives.
- ✓ Whether or not the Blackboard Learning Management System is used.
- $\checkmark$  The facilities provided by the University to support the use of the Blackboard system.
- ✓ Obstacles to the use of the Blackboard Learning Management System.
- ✓ Reasons for not using the Blackboard Learning Management System
- ✓ Directions towards the use of the Blackboard Learning Management System.
- 3. After carrying out the interviews: After carrying out the interviews, the researcher does the following:
- ✓ The sample answers were transcribed into a special Word document for each individual after each interview.
- ✓ Data and information obtained from the interviews were collected for qualitative analysis.
- $\checkmark$  The content of the interview responses was analyzed to ensure that they are related to the objectives of the study.

# **Reliability of the Study Instrument:**

Reliability was confirmed by textual analysis of the responses of the sample members, and by scientific review of all that was recorded in the interviews several times, and by making sure that the responses of each of the sample members were fully and accurately recorded.

# **RESULTS AND DISCUSSION**

To answer the questions of the study, faculty members 'interviews were surveyed and the interview results analyzed, as shown in the following tables:

Table (1) Answers of the respondents who do not use the Blackboard system to the interview qu	uestions
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	Interview 1	Interview 2	Interview 3	Interview 4	Interview 5	Interview 6
Q 1	I think it is	There's really no	Other	Its difficulty	I had difficulty	I don't think
	complex and	need to use	alternatives	lies in the	dealing with	it is very
	burdensome for	Blackboard,	are similar and	language,	Blackboard	useful that
	students, and	students are	free, and have	and the	due to the	we can use
	Blackboard needs	close and easy	more features	many	large number	other
	constant training.	to communicate	and services	administrativ	of courses.	alternatives.
		with	such as a	e burdens it		
			template or	has.		
			wiki.		*	
Q 2	The university	The university	The university	There is a	I think there is	Training is
	has provided all the facilities,	has provided facilities to use	provided the facilities, and	failure by the	little interest on the part of	not directed and there is
	including	Blackboard	if I did not	university in	the university	a deficiency
	equipment,	Diackooalu	find	terms of	administration	in technical
	system, courses,		alternatives, I	training and	in terms of	support.
	technical support		would use it.	technical	providing	support.
	and aids.		would use it.	support.	Blackboard	
				~~FF	supplies	
Q 3	The system is	There are no	There are no	The system	The system is	The system
	complicated at	difficulties as	difficulties,	is smooth,	not clear, and	is not easy
	least for me, and	shown in the	and his	its interfaces	with the many	and needs
	the courses	courses, except	difficulties are	are difficult,	burdens at the	courses, and
	offered are	for getting used	typical for any	and it	university puts	I do not
	offered to a large	to the system	new program.	requires a lot	the possibility	know if they
	number of			of time.	of its use low.	are
	beneficiaries, so it					available.
	is difficult to follow the trainer.					
Q 4	I encourage using	I cannot judge	I encourage	I would	The system is	I support its
V 4	it whenever time	until after use,	using it	recommend	excellent and	use and
	is available	but I think it is	whenever the	it if	its use is very	enabling it.
		useful for me	technical	alternatives	comfortable	
		and the students.	support and	are not	even for	
			training are	available.	students.	
			available.			

Table (2) Answers of Blackboard System users to the interview questions								
	Interview 7	Interview 8	Interview 9	Interview 10	Interview 11	Interview 12		
Q 1	Upload course plans including content, assignment,	Uploading course plans from electronic tests, monitoring	Upload assignments to students and receive them	Upload the layout and content of the lectures.	Uploading activities, assignments, and courses	Upload content, storage and discussions		
	storage, discussion and dialogue	grades and virtual classes.	from them.			to the e- mail.		
Q 2	Providing technical support facilities for the system.	Providing facilities for e- learning courses.	The courses are few and the technical support is not at the required level.	Facilities are few, especially during the official working hours, which hinder the educational process.	There are not enough icons in the system to submit assignments.	The facilities are fairly good in terms of online homework and tests.		
Q 3	I do not see that there are any difficulties except for some of them related to the videos.	Difficulties lie in the interface of the system and the inability to deal with it.	Raising the course to several people, and this needs enough time.	Having difficulties dealing with modern tools.	System icons weren't clear to me.	Raising assignments for a large number of students is difficult.		
Q 4	I recommend using Blackboard because it saves effort and time.	I recommend using Blackboard because it arranges activities and gives room for creativity.	Blackboard assists in arranging files received from students.	I support to use Blackboard and make use of all the tools in activating the activities.	I recommend using it as it facilitates the communicatio n process.	I recommend using it because it arranges the chores and is also enjoyable in the learning process.		

 Table (2) Answers of Blackboard System users to the interview questions

## **Discussion and interpretation of results:**

The first question: What are the most important Blackboard education management system services actually used by faculty members at the University of Hail?

To answer this question, the researcher classified the data obtained through the responses of the sample members to the interview questions. The results showed that the most effective services used by faculty members at the University of Hail with students are: First of all Uploading course plans and teaching content and raising and receiving assignments from students, followed by cloud storage, discussion and dialogue rooms, and e-mail, and in the last place electronic exams and score monitoring, creating virtual classes, blogs, wikis, student groups, and opinion polls.

**The second question:**What is the availability of facilities for faculty members at the University of Hail to use the Blackboard system?

The results showed and according to the opinion of nearly half of the faculty members in this study, the University of Hail has provided the necessary facilities to use the Blackboard e-learning management system, and these facilities are primarily represented in providing training courses, providing technical support, and in a small percentage the educational messages about the new Blackboard services Sent on the e-mail of faculty members by the Deanship of E-Learning were considered among the facilities provided by the university for a faculty member to use the Blackboard system. Less than half of the study sample members believed that the university provided some facilities, but they were insufficient for the faculty member to use the system.

This result can be explained by the fact that the seven individuals of the sample who reported the availability of facilities; Three of them are non-users of the system or previous users of it, and one of the six was limited to using the Blackboard system to only one service, which is uploading courses, and two of the sample users of the system and who reported the availability of facilities from training and technical support courses are users of the system and its services significantly, with professionalism and previous knowledge, despite that, they reported that among the difficulties they faced in using the system was the difficulty in accessing technical support and the incompatibility of course times with the times of faculty members.

The third question: What are the difficulties that face faculty members at the University of Hail in using the Blackboard system?

The results of the interviews showed the most important difficulties that they face in terms of using the Blackboard system, which are the weakness of technical support and the difficulty of reaching the person responsible for the support in the first place.Likewise the lack of training courses that train on using the Blackboard system, followed immediately by the lack of time in exchange for the large teaching and administrative burdens required of the faculty member. Then came the difficulties students face in using the system, and then the difficulty and complexity of the system's interfaces. The results indicated that nine of the study sample agreed that the difficulty of the system interfaces and the tools used in it is one of the most difficulties they faced were the weak technical support provided by the university, and the difficulty of reaching the person responsible for supporting the system, and this result can be explained by the lack of training courses and the weak technical support provided to faculty members.

The fourth question: What are the attitudes of the faculty members at the University of Hail towards using the Blackboard system?

It is evident from the results of the interviews that the attitudes of most of the faculty members who are users and non-users of the system are positive towards using the Blackboard system, and the majority of faculty members support and encourage the use of the Blackboard Learning Management System to manage e-learning, and some stipulated the provision of training courses and technical support. While a few faculty members discouraged the use of the Blackboard system and supported its replacement with other free and more services alternatives.

The researcher attributes this result to the faculty members 'conviction of the benefits of the Blackboard system for e-learning management, and their knowledge of it either through direct use or what is seen in the course content and advertisements, but the difference in use may be due to the lack of sufficient facilities to activate the use of the Blackboard system, or the non-payment of members the teaching staff uses the system, or because of the lack of incentives and rewards to encourage its use, and according to the testimony of two sample members, the reason may be the availability of free alternatives and more services.

# **RECOMMENDATIONS:**

- 1. Recommendations for learning management systems
- When planning to use a learning management system, consideration must be given to linking all procedures to the administrative systems of a faculty member, so that using the portal is at the core of his work.
- Conducting evaluation studies for learning management systems at the university level in the Kingdom that include basic pillars, including the evaluation of the beneficiaries, students, faculty members and workers on the systems in terms of knowledge, skills and direction, and evaluation of systems, their analysis and statistics.
- Conducting comparative studies on designing education for the use of a faculty member of the learning management systems, and attention to enabling the faculty member to use various multimedia and managing the tools on the portal in teaching in connection with learning theories.
- 2. Recommendations for the administration of the University of Hail
- Providing material incentives to users of the Blackboard system, such as linking the use of the Blackboard system to the computer allowance provided to a faculty member, and having clear criteria and implementation standards for follow-up.
- Considering the use of e-learning as teaching hours and calculated from the quorum of a faculty member, on the condition that this use is provided using the Blackboard learning management system instead of direct encounter with students.
- 3. Recommendations of the Deanship of E-Learning at the University of Hail:
  - Organizing training courses for the Blackboard e-learning management system and distributing them to suit the faculty members 'schedules.
  - Providing faculty members with video clips to explain the tools and capabilities that are easy to access at any time and be short and targeted by e-mail.
  - Intensification of training courses for the Blackboard e-learning management system.
  - Facilitating access to technical support for the Blackboard Learning Management System by publishing numbers and support e-mail for quick and direct communication with support officials.
  - Providing training courses for the Blackboard Learning Management System for university students in basic skills.

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